

from the following description of preferred embodiments when read in connection with the appended drawings, in which:--

Page 6, line 1: insert –DESCRIPTION OF THE PREFERRED EMBODIMENT.–;

Page 7, line 1: cancel “Patent Claims” and substitute “What is claimed is” therefor; and

Page 10, line 1: cancel “Abstract” and substitute –ABSTRACT OF THE DISCLOSURE.– therefor.

In the Claims: cancel claims 1-8 and substitute the following new claims:

9. (New) An apparatus for generating a droplet target, comprising:
- at least one receptacle for receiving a target liquid and adapted to have its interior maintained under high pressure;
 - an electromagnetic valve switching between open and closed states by pulses in the range of ms;
 - means for feeding target liquid to the valve from the receptacle;
 - a supersonic nozzle;
 - an expansion channel for feeding target liquid from the valve to the nozzle;
 - heating means associated with the expansion channel for converting target liquid therein to supersaturated vapor by a predetermined temperature; and
 - insulating means between the electromagnetic valve and the heating means.
10. (New) The apparatus of claim 9, wherein the pressure is maintained by a non-reactive gas.
11. (New) The apparatus of claim 10, wherein the non-reactive gas is nitrogen.

12. (New) The apparatus of claim 9, wherein the predetermined temperature is about 150 °C.
13. (New) The apparatus of claim 9, wherein the duration of the pulses is 2 ms.
14. (New) The apparatus of claim 9, wherein the expansion channel is of a length from between several mm and several 10 mm and of a diameter of from several 100 μm into the range of mm.
15. (New) The apparatus of claim 14, wherein the length is 15 mm and the diameter is 1 mm.
16. (New) The apparatus of claim 9, wherein the supersonic nozzle is provided with a conical opening angle 2Θ of from several degrees to several 10 degrees, an input opening of several 100 μm diameter and a conically shaped section of a length of several mm.
17. (New) The apparatus of claim 16, wherein the opening angle is 7° , the diameter is 500 μm and the length of the conically shaped section is 8 mm.
18. (New) A method of making a droplet target, comprising the steps of:
filling a receptacle with a target liquid;
maintaining a predetermined pressure within the receptacle;
briefly opening the receptacle by means of a pulsed electromagnetic valve;
feeding the target liquid through the electromagnetic valve into an expansion channel;
heating the expansion channel to a temperature sufficient to convert the target liquid into a supersaturated vapor;
feeding the supersaturated to a supersonic nozzle;
cooling the supersaturated vapor passing to the nozzle to condense to